

## Title (en)

Method and apparatus to enable fast decoding of transmissions with multiple code blocks

## Title (de)

Verfahren und Gerät zum Ermöglichen einer schnellen Dekodierung von Übertragungen mit mehreren Kode-Blöcken

## Title (fr)

Procédé et appareil permettant un décodage rapide des transmissions à plusieurs blocs de code

## Publication

**EP 1971096 A3 20140312 (EN)**

## Application

**EP 08004473 A 20080311**

## Priority

- US 91850307 P 20070316
- US 92005607 P 20070326
- US 92032407 P 20070327
- US 3964508 A 20080228

## Abstract (en)

[origin: EP1971096A2] A method includes separating resource elements from multiple code blocks into different groups, and decoding the code bits of the resource elements within each group without waiting for a completed reception of a transport block to start decoding. A method includes separating coded bits from multiple code blocks into different groups, and decoding the code blocks containing coded bits within each group. A first CRC is attached to the transport block and a second CRC is attached to at least one code block from the transport block. An improved channel interleaver design method including mapping from coded bits of different code blocks to modulation symbols, and mapping from modulation symbols to time, frequency, and spatial resources, to make sure each code block to get roughly the same level of protection.

## IPC 8 full level

**H04L 27/26** (2006.01); **H03M 13/09** (2006.01); **H04B 7/04** (2006.01); **H04B 7/06** (2006.01); **H04J 11/00** (2006.01); **H04L 1/00** (2006.01); **H04L 1/04** (2006.01); **H04L 1/06** (2006.01); **H04L 1/18** (2006.01); **H04L 5/00** (2006.01); **H04L 25/02** (2006.01); **H04L 47/43** (2022.01)

## CPC (source: EP KR US)

**G06F 11/1004** (2013.01 - US); **H03M 13/09** (2013.01 - KR US); **H04B 1/7107** (2013.01 - EP US); **H04B 7/068** (2013.01 - EP US); **H04J 11/004** (2013.01 - EP US); **H04L 1/0003** (2013.01 - EP KR US); **H04L 1/004** (2013.01 - KR); **H04L 1/0041** (2013.01 - US); **H04L 1/005** (2013.01 - EP KR US); **H04L 1/0061** (2013.01 - EP KR US); **H04L 1/0065** (2013.01 - EP KR US); **H04L 1/0068** (2013.01 - EP US); **H04L 1/0071** (2013.01 - EP KR US); **H04L 1/04** (2013.01 - EP US); **H04L 1/1819** (2013.01 - EP US); **H04L 1/1867** (2013.01 - EP US); **H04L 5/0007** (2013.01 - EP KR US); **H04L 5/0048** (2013.01 - EP KR US); **H04L 5/0053** (2013.01 - EP KR US); **H04L 25/0204** (2013.01 - EP KR US); **H04L 25/0224** (2013.01 - EP US); **H04L 27/2647** (2013.01 - EP US); **H04B 7/0439** (2013.01 - EP US); **H04B 7/0452** (2013.01 - EP US); **H04L 1/0026** (2013.01 - EP US); **H04L 1/0618** (2013.01 - EP US)

## Citation (search report)

- [X] WO 2007021153 A1 20070222 - KOREA ELECTRONICS TELECOMM [KR], et al
- [X] WO 2006102745 A1 20061005 - NORTEL NETWORKS LTD [CA], et al
- [X] US 2007030836 A1 20070208 - SUH KYUNG-JOO [KR], et al
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## Designated contracting state (EPC)

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## Designated extension state (EPC)

AL BA MK RS

## DOCDB simple family (publication)

**EP 1971096 A2 20080917; EP 1971096 A3 20140312; EP 1971096 B1 20190109;** AU 2008227371 A1 20080925; AU 2008227371 B2 20110602; CA 2680375 A1 20080925; CA 2680375 C 20161004; CN 101636938 A 20100127; CN 101636938 B 20130619; CN 103269261 A 20130828; DE 202008018239 U1 20120404; DE 202008018242 U1 20120402; DE 202008018331 U1 20130415; DE 202008018337 U1 20130204; EP 3490211 A1 20190529; EP 3490211 B1 20200930; JP 2010521916 A 20100624; JP 2012120217 A 20120621; JP 2014014165 A 20140123; JP 2015144480 A 20150806; JP 5144686 B2 20130213; JP 5596714 B2 20140924; JP 5730972 B2 20150610; JP 6320338 B2 20180509; KR 101463890 B1 20141120; KR 20090125080 A 20091203; RU 2009134548 A 20110320; RU 2428796 C2 20110910; TW 200904089 A 20090116; TW 1484795 B 20150511; US 2008225965 A1 20080918; US 2013145239 A1 20130606; US 2016028505 A1 20160128; US 8379738 B2 20130219; US 9525513 B2 20161220; US 9590765 B2 20170307; WO 2008114957 A1 20080925

## DOCDB simple family (application)

**EP 08004473 A 20080311;** AU 2008227371 A 20080313; CA 2680375 A 20080313; CN 200880008636 A 20080313; CN 201310187679 A 20080313; DE 202008018239 U 20080311; DE 202008018242 U 20080311; DE 202008018331 U 20080311; DE 202008018337 U 20080311; EP 19150748 A 20080311; JP 2009554440 A 20080313; JP 2012008717 A 20120119; JP 2013193152 A 20130918; JP 2015063858 A 20150326; KR 2008001425 W 20080313; KR 20097018278 A 20080313; RU 2009134548 A 20080313; TW 97109104 A 20080314; US 201213678321 A 20121115; US 201514877558 A 20151007; US 3964508 A 20080228